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CLIENT	RE:	TIME	PAGES (INCLUDING COVER)
000293.0008	U.S. patent application No. 09/406,575		11

## MESSAGE

Examiner Prebilio,  
Attached is a draft amendment further to  
my voicemail. Please call me to discuss.

Thanks,  
Stuart Yothers  
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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-43. (Cancelled)

44. (Previously presented) An anastomotic connector for attaching two blood vessels, comprising:  
a cylindrical portion defining a lumen; and  
a plurality of tissue engaging portions for engaging two blood vessels to form a fluid-tight connection between an opening in a sidewall of one of said two blood vessels and the other of said two blood vessels, said plurality comprising at least one spike, wherein radial expansion of said cylindrical portion causes said at least one spike to engage tissue.

45. (Previously presented) An anastomotic connector for attaching two blood vessels, comprising:  
a cylindrical portion defining a lumen; and  
a plurality of tissue engaging portions for engaging two blood vessels to form a fluid-tight connection between an opening in a sidewall of one of said two blood vessels and the other of said two blood vessels, wherein radial expansion of said cylindrical

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portion is coupled to axial contraction of said cylindrical portion.

46. (Previously presented) A connector according to claim 45 wherein, when axial contraction has occurred, radial expansion has occurred.

47. (Previously presented) A connector according to claim 45 wherein, when axial contraction has occurred, radial expansion has occurred.

48. (Previously presented) A connector according to claim 45 wherein, when axial contraction has occurred, radial expansion has occurred.

49. (Previously presented) A connector according to claim 45 wherein, when axial contraction has occurred, radial expansion has occurred.

50. (Previously presented) A connector according to claim 45 wherein, when axial contraction has occurred, radial expansion has occurred.

51. (Previously presented) A connector according to claim 45 wherein, when axial contraction has occurred, radial expansion has occurred.

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52. (Previously presented) A connector according to claim 45 wherein, when axial contraction has occurred, radial expansion has occurred.

53. (Previously presented) A connector according to claim 45, wherein said radial expansion activates at least one of said tissue engaging portions.

54. (Previously presented) A connector according to claim 45, wherein at least one of said tissue engaging portions comprises at least one spike.

55. (Previously presented) A connector according to claim 44 or 54, wherein said spike is pre-stressed to lie outside of an axial profile of said cylindrical portion.

56. (Previously presented) A connector according to claim 44 or 54, wherein said cylindrical portion is arranged to twist, in at least one location thereon, which location is coupled to said at least one spike, whereby said twist causes said spike to extend.

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57. (Previously presented) A device according to any of claims 44-54, wherein said lumen has fixed inner diameter.

58. (Previously presented) A device according to any of claims 44-54, wherein said lumen has a varying inner diameter.

59. (Previously presented) A device according to any of claims 44-54, wherein said cylindrical portion comprises at least one part which is super-elastic.

60. (Previously presented) A device according to any of claims 44-54, wherein said cylindrical portion comprises at least one part which comprises a temperature-triggered shape-memory material.

61. (Previously presented) A device according to any of claims 44-54, wherein said cylindrical portion comprises at least one part which comprises a temperature-responsive bi-material composite, which changes its geometry under the effect of small temperature changes.

62. (Previously presented) A device according to any of claims 44-54, wherein said at least one of

tissue engagers comprises at least one part which is super-elastic.

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63. (Previously presented) A device according to any of claims 44-54, wherein at least one of said tissue engagers is adapted to engage a non-everted graft.

64. (Previously presented) A device according to any of claims 44-54, wherein all of said tissue engagers are adapted to engage said blood vessels inside a body.

65. (Previously presented) A device according to any of claims 44-54, wherein said cylindrical portion has an axial dimension selected relative to a wall thickness of the tissue.

66. (Previously presented) A device according to any of claims 44-54, wherein said cylindrical portion has an axial dimension selected relative to a wall thickness of the tissue.

67. (Previously presented) A device according to any of claims 44-54, wherein said cylindrical portion has an axial dimension selected relative to a wall thickness of the tissue.

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68. (Previously presented) A device according to any of claims 44-54, wherein said cylindrical portion has an axial dimension selected relative to a wall thickness of the tissue.

69. (Previously presented) A device according to any of claims 44-54, wherein said cylindrical portion has an axial dimension and a diameter selected relative to a wall thickness and vessel diameter of the tissue.

70. (Previously presented) A device according to any of claims 44-54, wherein said cylindrical portion has an axial dimension and a diameter selected relative to a wall thickness and vessel diameter of the tissue.

71. (Previously presented) A device according to any of claims 44-54, wherein said cylindrical portion has an axial dimension and a diameter selected relative to a wall thickness and vessel diameter of the tissue.

72. (Previously presented) A device according to any of claims 44-54, wherein said cylindrical portion has an axial dimension and a diameter selected relative to a wall thickness and vessel diameter of the tissue.

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73. (Previously presented) A device according to any of claims 44-54, wherein said cylindrical portion is arranged to expand radially.

74. (Previously presented) A device according to any of claims 44-54, wherein said cylindrical portion is arranged to expand radially.

75. (Previously presented) A device according to any of claims 44-54, wherein said cylindrical portion is arranged to expand radially.

76-86. (Cancelled)

87. (Previously presented) An anastomotic connector for attaching two blood vessels, comprising:  
a cylindrical portion defining a lumen; and  
a plurality of tissue engaging portions for engaging the two blood vessel to form a fluid-tight connection between an opening in a sidewall of one of said two blood vessels and the other of said two blood vessels, wherein said connector has at least two configurations, a first configuration in which said tissue engaging portions are at a first extension state and a second configuration wherein said tissue engaging portions are at a second extension state, wherein said



connector exhibits a bi-modal behavior in changing from said first configuration to said second configuration, and wherein said configuration change is effected by expanding said cylindrical portion.

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88. (Cancelled)

89. (Previously presented) A connector according to claim 87, wherein said configuration change comprises the extension of a plurality spikes.

90. (Previously presented) A connector according to claim 87, comprising at least one bi-stable element that controls said configuration change.

91. (Previously presented) A connector according to claim 87, comprising at least one restraining element that controls said configuration change.

92. (Currently amended) An anastomotic connector for attaching two blood vessels, comprising:  
a cylindrical portion defining a lumen; and  
a plurality of tissue engaging portions for engaging the two blood vessels to form a fluid-tight

connection between an opening in a sidewall of one of

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said two blood vessels and the other of said two blood vessels, wherein said connector has at least two configurations, a first configuration in which said tissue engaging portions form a vessel piercing tip and a second configuration wherein said tissue engaging portions are operative to engage tissue; and

wherein a configuration change from the first configuration to the second configuration is effected by expanding said cylindrical portion.

93. (Previously presented) A connector according to claim 92, wherein said plurality of tissue engaging portions comprise at least one spike.

94. (Previously presented) A connector according to claim 92, wherein said plurality of tissue engaging portions are arranged at one end of said cylindrical portions and comprising a second plurality of tissue engaging portions adjacent the other end of said cylindrical portion.

95-143. (Canceled)

144. (Currently amended) An anastomotic connector for attaching two blood vessels, comprising:

a cylindrical portion defining a lumen;

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a plurality of clip segments for engaging the two blood vessels to form a fluid-tight connection between an opening in a sidewall of one of said two blood vessels and the other of said two blood vessels; and

a plurality of twistable resilient segments that interconnect the clip segments, wherein radial expansion of said cylindrical portion causes said plurality of clip segments to engage tissue.

145. (Previously presented) A connector according to claim 144, wherein said twistable resilient segments are bendable out of a plane defined by said clip segments.

146. (Previously presented) A connector according to claim 144, wherein a resilience of said twistable resilient segments is defined to control a diameter changing behavior of said connector.

147. (Previously presented) A connector according to claim 144, wherein said clip segments do penetrate target tissue when the clip closes, but do not transfix said tissue.